UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,790	07/26/2006	Francis Chi	OBI-103CXC1	6044
	7590 12/18/200 K LLOYD & SALIW	EXAMINER		
A PROFESSIONAL ASSOCIATION			KWON, BRIAN YONG S	
PO BOX 142950 GAINESVILLE, FL 32614-2950			ART UNIT	PAPER NUMBER
			1614	
			MAIL DATE	DELIVERY MODE
			12/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/585,790	CHI ET AL.			
Office Action Summary	Examiner	Art Unit			
	Brian-Yong S. Kwon	1614			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on <u>28 Mar</u> This action is <b>FINAL</b> . 2b)⊠ This      Since this application is in condition for alloward closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-26 is/are pending in the application. 4a) Of the above claim(s) 1-17 is/are withdrawn 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 18-26 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers  9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on is/are: a) ☐ acceedable and applicant may not request that any objection to the orecastic requested to the correction of t	r election requirement. r. epted or b)⊡ objected to by the B drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
11)☐ The oath or declaration is objected to by the Ex					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/26/06.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte			

Art Unit: 1614

#### **DETAILED ACTION**

### Applicants Response to Restriction Requirement Acknowledged

1. Applicant's election with the Group II along with cysteamine hydrochloride as the elected species is acknowledged. Because applicant did not specifically traverse the restriction requirement, the election has been treated as an election without traverse.

Claims 1-17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected claims.

### Information Disclosure Statement

2. Enclosed is an initialed copy of PTO 1449 which has been considered for your records, Application No. 10/585790.

# Claim Rejections - 35 USC § 112 - 1st Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 18-19 and 22-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. This is a written description rejection, rather than an enablement rejection under 35 U.S.C. 112, first paragraph. Applicant is directed to the Guidelines for the Examination of

Art Unit: 1614

Patent Applications Under the 35 U.S.C. 112, 1<sup>st</sup> "Written Description" Requirement, Federal Register, Vol. 66, No. 4, pages 1099-1111, Friday January 5, 2001.

The claims are drawn to methods of administering a cysteamine compound including prodrugs of cysteamine, analogs of cysteamine, derivatives of cysteamine, conjugates of cysteamine and metabolites of cysteamine.

The specification discloses cysteamine and cysteamine salt (e.g., cysteamine hydrochloride and cysteamine phosphate) as the specific embodiments of the invention, which meet the written description and enablement provisions of 35 USC 112, first paragraph.

However, the claims 12, 15-17, 19 and 21-24 are directed to encompass "prodrugs", "derivatives", "analogs", "conjugates" and/or "metabolites" which only correspond in some undefined way to specifically instantly disclosed chemicals. None of these meet the written description provision of 35 USC 112, first paragraph, due to lacking chemical structural information for what they are and chemical structures are highly variant and encompasses a myriad of possibilities. To the extent that no structure function data is disclosed in connection with theses functionally described compounds to correlate, or there is not disclosed correlation established between these functional drugs and the contemplated desired therapeutic effect to be achieved in practicing the instant invention, the specification provides insufficient written description to support the genus encompassed by the claims.

<u>Vas-Cath Inc. Mahurkar</u>, 19 USPQ2d 1111, makes clear the "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the 'written description' inquiry, whatever is now claimed." (See page 1117.) The specification does not "clearly allow persons of

Art Unit: 1614

ordinary skill in the art to recognize that [he or she] invented what is claimed." (See <u>Vas-Cath</u> at page 1116).

With the exception of cysteamine and cysteamine salt, the skilled artisan cannot envision the detailed chemical structure of the encompassed derivatives, analogs, etc., regardless of the complexity or simplicity of the method of isolation or making it. Adequate written description requires more than a mere statement that it is part of the invention and reference to a potential method for isolating it. See <a href="Fiers v. Revel">Fiers v. Revel</a>, 25 USPQ2d 1601, 1606 (CAFC 1993) and <a href="Amgen Inc. V. Chugai pharmaceutical Co. Ltd.">Amgen Inc. V. Chugai pharmaceutical Co. Ltd.</a>, 18 USPQ2d 1016. In <a href="Fiddes v. Baird">Fiddes v. Baird</a>, 30 USPQ2d 1481, 1483, claims directed to mammalian FGF's were found unpatentable due to lack of written description for the broad class. The specification provided only the bovine sequence.

Finally, <u>University of California v. Eli Lilly and Co.</u>, 43 USPQ2d 1398, 1404, 1405 held that:

...To fulfill the written description requirement, a patent specification must describe an invention and do so in sufficient detail that one skilled in the art can clearly conclude that "the inventor invented the claimed invention." *Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966(1997); In re Gosteli, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989)* ("[T]he description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed.") Thus, an applicant complies with the written description requirement "by describing the invention, with all its claimed limitations, not that which makes it obvious," and by using "such descriptive means as words, structures, figures, diagrams, formulas, etc., that set forth the claimed invention." *Lockwood, 107 F.3d at 1572, 41 USPO2d at 1966.* 

Art Unit: 1614

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 18-22 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Bernton et al. (US 5605885).

Bernton teaches the administration of prolactin agonist (e.g., cysteamine or cysteamine HC), singly or in combination (e.g., glucocorticosteroid or cyclosporine), to an immunosuppressed animal or human thereby stimulating the immune system by increasing the blood levels or activity of the hormone prolactin, including antagonizing suppression of immune function by chronic stress, wherein said cysteamine is administered orally once or twice each day to achieve adequate immunostimulation in approximately 1 to 25 mg per kg body weight (column 5, lines 5-8; column 8, lines 61-65; column 4, lines 17-23; column 10, line 52 through column 11, line 53).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1614

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernton et al. (US 5605885) in view of McCleary (US 6964969).

The teaching of Bernton has been discussed in above 35 USC 102(b) rejection.

McCleary is being provided as a supplemental reference to demonstrate the routine knowledge in using therapy such as relaxation, massage, acupuncture, psychotherapy, meditation, taking a sedative and the like for the treatment of stress (column 21, lines 3-14).

The teaching of Bernton differs from the claimed invention in the use of cysteamine and therapy (e.g., counseling, psychotherapy, exercise, meditation and massage therapy).

Above references in combination make clear that cysteamine and therapy such as relaxation, massage, acupuncture, psychotherapy and meditation have been individually used for the treatment of stress. It is obvious to combine two compositions each of which is taught by prior art to be useful for same purpose; idea of combining them flows logically from their having been individually taught in the prior art. The combination of active ingredient with the same character is merely the additive effect of each individual component. *See In re Kerkhoven, 205 USPQ 1069 (CCPA 1980)*.

# Conclusion

- 6. No Claim is allowed.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Kwon whose telephone number is (571) 272-0581. The examiner can normally be reached Tuesday through Friday from 9:00 am to 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached on (571) 272-0718. The fax number for this Group is (571) 273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent
Application Information Retrieval (PAIR) system. Status information for published applications
may be obtained from either Private PAIR or Public PAIR. Status information for unpublished
applications may be obtained from Private PAIR only. For more information about PAIR system,

Art Unit: 1614

see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a> Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/Brian-Yong S Kwon/ Primary Examiner, Art Unit 1614